

**Attendees:**

Rolf Eppinger  
Jac Wismans  
Dominique Cesari  
Koshiro Ono  
Minoru Sakurai  
Fumio Matsuoka  
Hideki Yonezawa  
Mark Terrell  
Dainius Dalmotas  
Suzanne Tylko

Chairman/ NHTSA  
TNO/ EU/ EEVC/ WG12  
  
JARI/ Japan  
JMOT/ JARI Japan  
JAMA/OICA Japan  
Observer  
DoTRS/ Australia  
Secretary/ Transport Canada  
Transport Canada

**1. Introductions**

**2. Agenda**

- 2.1. Agenda was reviewed and accepted.

**3. Terms of Reference discussion**

- 3.1. Mission & objectives:  
a forum for coordinating future research provide biomechanical expertise.
- 3.2. Scope:  
Add something on future strategic plan for biomechanical research
- 3.3. Action Plan:
- Prioritization is inherent in action plan
  - What is in progress must have priority i.e., finish the report for side impact.
  - Should have an action plan of subjects to pursue with new agenda items to be added as they arise. Products will be reviewed every 2 years.
  - Documentation of biofidelity evaluation criteria for frontal dummy would be a timely/useful deliverable
  - Look to ESV dates as target dates frontal dummy work for example, should be completed by next ESV May 19-22.
  - Suggestion made that the group prepare a 'white paper'
  - Mr. Cesari feels we may be out of sync with developments of the frontal dummy, sees white paper as a guide for future reference, a proper white paper would take at least 1 year or more, question of priorities.
  - Topics that need coordinated effort, research needs paper may be sufficient
  - Frontal dummy biofidelity requirements based on existing tests, rating of existing tests Dec 2001 would be final date, white paper would follow 6 months later in June 2002
- 3.4. Conclusion to discussion of Terms of Reference Document  
Members will review wording and submit additional recommended changes to secretary at their earliest convenience. The chairman will then distribute the Terms of Reference for final approval.

**4. Previous Minutes**

- 4.1. The minutes were accepted as modified.

**5. Side Impact Report Task Review**

- 5.1. NHTSA (Matt Maltese / Rolf Eppinger)
  - 5.1.1. Verify that mass sex of MCW cadavers are comparable to VRTC. Data provided in table see attached.
  - 5.1.2. Determine whether full thorax or half thorax chest deflection improves injury prediction  
Improvements of existing model still under review.
  - 5.1.3. Energy force plots have been added to existing document.
  - 5.1.4. New cadaver data has been added
- 5.2. Review of biofidelity rating methods
  - 5.2.1. Variance method introduced by Rolf Eppinger.  
Discussions of effect of phase on variance:  
Same procedure is applied to the dummies, corridors are built from mean  $\pm$  1 SD  
Cumulative variance of the dummies/ cumulative variance of the cadavers  
Mr. Eppinger explained that time zero is the time the cadaver strikes the wall;  
Method has been done for SID, ES2 and will be doing WorldSID (NHTSA), procedure will be repeated without phase shifting.  
Adjusted time shift will be documented.  
Jac Wismans & Michiel Van Ratingen will review the proposal and send opinions.
- 5.3. Documentation of Injury Criteria
  - 5.3.1. Members are requested to submit injury criteria selection to Mr. Cesari by July 31, 2001.

**6. Frontal Impact Dummy Task**

- 6.1. Jac Wismans will send timeline of FID project and include criteria for inclusion on the next agenda
7. **Next meeting** Lyon August 30 – 31, 2001